

WEST VIRGINIA SECRETARY OF STATE

MAC WARNER

ADMINISTRATIVE LAW DIVISION

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Office of West Virginia Secretary Of State

NOTICE OF PUBLIC COMMENT PERIOD

AGENCY:

Miner Training Education And Certification

TITLE-SERIES: 48-03

RULE TYPE:

Legislative

Exempt

Amendment to Existing Rule: Yes

Repeal of existing rule:

No

RULE NAME:

Safety Training Programs for Prospective Surface

Coal Miners

CITE STATUTORY AUTHORITY:

W. Va. Code §§22A-6-4 and 22A-6-5

COMMENTS LIMITED TO:

Written

DATE OF PUBLIC HEARING:

LOCATION OF PUBLIC HEARING:

DATE WRITTEN COMMENT PERIOD ENDS: 06/17/2021 5:00 PM

COMMENTS MAY BE MAILED OR EMAILED TO:

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PLEASE INDICATE IF THIS FILING INCLUDES:

RELEVANT FEDERAL STATUTES OR REGULATIONS:

No

(IF YES, PLEASE UPLOAD IN THE SUPPORTING DOCUMENTS FIELD)

INCORPORATED BY REFERENCE:

No

(IF YES, PLEASE UPLOAD IN THE SUPPORTING DOCUMENTS FIELD)

PROVIDE A BRIEF SUMMARY OF THE CONTENT OF THE RULE:

This rule establishes the standards and requirements for training for a person who has never worked on a surface coal mine and wants to take the required 40-hour class to become a surface apprentice coal miner. The rule also establishes what criteria and instruction materials a training company conducting the training must meet and have available before that company can have a surface mine training apprentice program approved by the West Virginia Office of Miners Health, Safety and Training.

SUMMARIZE IN A CLEAR AND CONCISE MANNER CONTENTS OF CHANGES IN THE RULE AND A STATEMENT OF CIRCUMSTANCES REQUIRING THE RULE:

Pursuant to the regulatory review and reform initiatives established in W. Va. Code §29A-3-20 (2016) and Executive Order No. 3-18, this proposed rule modifies and updates 48 C.S.R. 3 to cross-reference the correct authorizing portions of the West Virginia Code and corrects typographical errors including errors in paragraph numbering.

SUMMARIZE IN A CLEAR AND CONCISE MANNER THE OVERALL ECONOMIC IMPACT OF THE PROPOSED RULE:

A. ECONOMIC IMPACT ON REVENUES OF STATE GOVERNMENT:

This proposed legislative-exempt rule is not anticipated to impact the revenues of state government.

B. ECONOMIC IMPACT ON SPECIAL REVENUE ACCOUNTS:

This proposed legislative-exempt rule is not anticipated to impact special revenue accounts.

C. ECONOMIC IMPACT OF THE RULE ON THE STATE OR ITS RESIDENTS:

This proposed legislative-exempt rule is not anticipated to economically impact the state or its residents.

D. FISCAL NOTE DETAIL:

Effect of Proposal	Fiscal Year					
	2021 Increase/Decrease (use "-")	2022 Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)			
1. Estimated Total Cost	0.0	0.0	0.0			
Personal Services	0.0	0.0	0.0			
Current Expenses	0.0	0.0	0.0			
Repairs and Alterations	0.0	0.0	0.0			
Assets	0.0	0.0	0.0			
Other	0.0	0.0	0.0			
2. Estimated Total Revenues	0.0	0.0	0.0			

E. EXPLANATION OF ABOVE ESTIMATES (INCLUDING LONG-RANGE EFFECT):

N/A

BY CHOOSING 'YES', I ATTEST THAT THE PREVIOUS STATEMENT IS TRUE AND CORRECT.

Yes

Jack M Rife -- By my signature, I certify that I am the person authorized to file legislative rules, in accordance with West Virginia Code §29A-3-11 and §39A-3-2.

TITLE 48 LEGISLATIVE <u>EXEMPT</u> RULE BOARD OF MINER TRAINING, EDUCATION AND CERTIFICATION

SERIES 3 SAFETY TRAINING PROGRAM FOR PROSPECTIVE SURFACE COAL MINERS

§48-3-1. General.

1.1. Sc	cope	Rule governi	ng the safety	training progr	am for prosp	pective surfa	ce coal mi	ners in V	Vest
Virginia.									

1.2.	Authority W. Va. Code §§22A-9-6 and 29A <u>§§22A-6-4 and 22A-6-5</u> .	
1.3.	Filing Date April 23, 1998.	_•
1.4.	Effective Date July 1, 1998.	

§48-3-2. Criteria for Health and Safety Training Program for Prospective Surface Coal Miners in West Virginia.

- 2.1. An approved training program must, as a minimum, include the topics described in the course outline in Section 3 of these rules this rule and meet the training objectives specified in Section 4 of these rules this rule. The time distribution for the subjects is a suggested one which can vary as long as the training objectives are achieved.
- 2.2. Any participating center may suggest modifications in the course outline, but such modifications must be approved by the Board of Miner Training, Education, and Certification Coal Mine Health and Safety. (See Section 5 of this rule for Training Program Approval Procedures.)
- 2.3. Training centers which offer this instruction may obtain the training materials developed specifically for the program from the West Virginia Department of Energy Office of Miners' Health, Safety and Training. Alternatively, a center may elect to develop or use its own materials which must be approved by the Board of Miner Training, Education, and Certification Coal Mine Health and Safety. (See Section 5 of this rule for Training Program Approval Procedures.)
- 2.4. Instructors for this program must be approved by the Department of Energy <u>West Virginia Office</u> <u>of Miners' Health, Safety and Training</u> as having demonstrated sufficient experience and/or knowledge of surface coal mining. (See Section 6 of this rule for Instructor Approval Procedures.)
- 2.5. The training equipment <u>and training materials</u> necessary for implementation of the surface mine training program is <u>are</u> as follows:
- 2.5.1. a. Audio-visual equipment suitable for presenting 16mm films, 35mm slides, transparencies and sound slide programs; Appropriate equipment necessary to present the Office of Miners' Health, Safety and Training course material;
- 2.5.2. b Personal safety equipment to include, as at a minimum, hard hats, safety glasses, safety shoes, respirators, gloves, hearing protection, and personal dust sampler/PDM;

2.5.3. c. First-aid equipment and supplies including an appliance suitable for practicing C.P.R./AED and artificial respiration;

The training program suggested for instruction of the surface mine training program is as follows: a. National Bituminous Coal Wage Agreement (latest copy);

- 2.5.4. b. A Copy of West Virginia mining laws pertaining to surface mines;
- 2.5.5. c. Samples of defective hand tools;
- 2.5.6. d. Tools used at surface mines (e.g., sledge hammer, spiking hammer, railroad jacks, hand shovel, pick and hammer);
- 2.5.7. e. Samples of shooting materials (e.g., blasting caps, lead wires, detonator, prime cord and ANFO). All materials must be demonstration materials only;
 - 2.5.8. f. Welding equipment;
 - 2.5.9. g. Samples of electrical cable in good and bad condition.
- 2.6. Any person, regardless of race, creed, color, national origin, sex, or age is eligible for the training program. But it should be understood by all prospective trainees that upon completion of the training program and receipt of the permit of apprenticeship, employment within the coal industry is not guaranteed. Each trainee will still be subject to their prospective employer's physical examination requirements and other employment standards. The Board of Miner Training, Education, and Certification Coal Mine Health and Safety assumes compliance with all equal opportunity employment requirements.
 - 2.7. Issuance and expiration of initial apprentice miner's card.
- 2.7.1. a. Upon completion of the approved forty (40) hour pre-employment training program, a permit of apprenticeship shall be issued to any person who scores at least seventy-five percent (75%) eighty per cent (80%) on the final examination administered by the West Virginia Department of Energy Office of Miners' Health, Safety and Training; Provided, That such person passes the examination within forty-five (45) days after completing the forty (40) hour program.
 - 2.7.2. b. The apprentice miner's card is valid for one (1) year.
- 2.7.3. e. If an apprentice begins apprenticeship ("on_the_job") training as a miner prior to the expiration date on the apprentice miner card, the card will remain valid until the completion of the apprenticeship training; Provided, That such training is continuous and a miner's certificate is obtained within eight (8) months.
- 2.7.4. d. If the apprentice does not begin apprenticeship ("on_the_job") training as a miner prior to the expiration date on the apprentice miner card, the card will become invalid on the expiration date.
- 2.7.5. e. Any prospective miner who does not score at least seventy-five eighty percent (80%) (75%) on the initial apprenticeship miner's examination will be given a second opportunity to retake such examination: Provided, That such person retakes and passes the exam within forty-five (45) days after completing the forty (40) hour program. In the event of failure on the second opportunity, the prospective miner must repeat the approved forty (40) hour pre-employment training program in order to retake the

examination.

- 2.8. Issuance and expiration of renewed apprentice miner's cards.
- 2.8.1. a. Apprentice miner's card may be renewed by retaking and passing with a score of at least seventy five percent (75%) eighty percent (80%) on the apprenticeship examination.
 - 2.8.2. b. The renewed apprentice miner's card is valid for twelve (12) months one (1) year.
- 2.8.3. e. If an apprentice does begins apprenticeship ("on_the_job") training as a miner prior to the expiration date on the renewed apprentice miner card, the card will remain valid until the completion of the apprenticeship training: Provided, That such training is continuous and a miner's certificate is obtained within eight (8) months.
- 2.8.4. d. If the apprentice does not begin apprenticeship ("on_the_job") training as a miner prior to the expiration date on the renewed apprentice miner card, the card will become invalid on the expiration date.
- 2.8.5. e. Any prospective miner who does not score at least seventy-five percent (75%) eighty percent (80) on the apprenticeship miner's examination in order to renew his/her apprentice certificate will be given a second opportunity to retake the examination: Provided, That such person retakes and passes the exam within thirty (30) days. In the event of failure to retake or pass the examination on the second opportunity, the prospective miner must repeat the approved forty (40) hour pre-employment training program in order to retake the examination.
 - 2.9. Independent coal truck driver certification.
- 2.9.1. a. Independent coal mine truck drivers who possess an independent coal truck driver's certification are not required to complete the approved surface mining (40 hours) or underground (80 hours) apprenticeship program nor must they possess a coal miner's certification in order to drive a coal truck on mine property.
- 2.9.2. b. To obtain an independent coal truck driver's certificate, a prospective independent coal truck driver must possess a first-aid card, a valid driver's license, and must successfully complete an eight (8) hour training course, prescribed by the Board of Miner Training, Education, and Certification Coal Mine Health and Safety, prior to taking the examination. Successful completion means a score of at least eighty percent (80%) percent.
- 2.9.3. c. Persons who possess an independent coal truck driver's certification are limited to driving coal trucks while on mine property and are not to engage in reclamation work or other mining activities. This experience will not be applicable toward a miner's certificate.
 - 2.10. Guidelines for issuing surface miner's certification.
- 2.10.1. a. After January 14, 1977, a Certificate of competency and qualification as a surface miner shall be issued to any person who has successfully completed the forty (40) hour apprenticeship program and has at least six (6) months total experience, being and one hundred eight (108) shifts; worked as an apprentice miner within this state and has demonstrated his her competency as a miner by scoring at least eighty percent (80%) on the surface miner's certification examination. Such certificate of competency is only required for those persons who perform normal duties of a surface miner.

- b. Any miner having six (6) months (one hundred eight (108) shifts) verified surface mining experience in the State of West Virginia prior to January 14, 1977, and having in their possession a first-aid certificate, is eligible to take the surface miners' certification examination.
- 2.10.2. e. Any miner with at least six (6) months and (one hundred eight (108) shifts) verified experience in a coal mine in another state and having in their possession a first-aid certificate is eligible to take the surface miner certification examination without attending and completing the approved forty (40) hour pre-employment training program. If the miner passes the examination with a score of at least eighty percent (80%) then that miner will be issued a surface miner's certificate. If any miner fails to achieve a score of eighty percent (80%) on the second attempt, then such miner will be required to complete the approved forty (40) hour pre-employment training program.
- 2.10.3. d. Any miner with less than six (6) months and fone hundred eight (108) shifts) experience in another state must complete the forty (40) hour pre-employment training program and work as an apprentice miner; however, the experience obtained in another state may be applied toward the six (6) month and fone hundred eighty (108) shifts) apprenticeship period.
- 2.10.4. ϵ . Experienced equipment operators: An equipment operator with experience operating surface mining equipment in an environment similar to a surface mine $\frac{by}{but}$ having no surface mining experience is required to complete the approved forty (40) hour pre-employment training program. After completing such training, an experienced equipment operator may be immediately qualified as a surface miner, provided that $\frac{b}{t}$ equipment operator has verification of at least six (6) months $\frac{b}{t}$ experience as an operator on surface mining equipment in a similar environment and scores at least eighty percent (80%) on the surface miner certification examination.
- 2.10.5. f. The term "normal duties," as used in the aforementioned requirements, includes all duties performed by surface or underground miners at a mine that are directly related to the production process, reclamation and routine maintenance activities; (excluding coal preparation and construction work pursuant to WV Rule, Title 36, Series 23 36 C.S.R. 23, Governing Surface Construction in Coal Mines).

§48-3-3. Course Outline Of The Training Program For Prospective Surface Coal Mines.

- 3.1. This course outline is sequenced by instructional units for forty (40) hours of student-teacher contact. Implementation of this program may be achieved by using the training materials available through the Department of Energy West Virginia Office of Miners' Health, Safety and Training. Alternatively, individual training centers may implement the outline through their own resources as approved by the Board of Miner Training, Education and Certification Coal Mine Health and Safety.
 - 3.2. 3.1. Miner's and operator's rights and responsibilities -- Estimated Time: one (1) hour.
 - 3.2.1. a) UMWA Contract;
 - 3.2.2. b) Company rules and regulations;
 - 3.2.3. e) Legal rights and responsibilities;
 - 3.2.4. d) Grievance procedures.
- 3.3. 3.2. State and federal laws and regulations that pertain to the new miner -- Time: one (1) hour. State and federal laws that pertain to the new miner.

- 3.4. 3.3. General orientation to surface mining -- Time: three (3) hours.
 - 3.4.1. a) How coal is mined;
 - 3.4.2. b) Types of surface coal mines;
 - 3.4.3. e) Types of surface mining methods;
 - 3.4.4. d) Basic surface coal mining terminology.
- 3.5. 3.4. Surface mine tour -- Estimated Time: two (2) hours. -- Note: If the tour is not possible, films videos or other appropriate instructional experience may be substituted.
 - 3.6. 3.5. First-aid--Part I -- Estimated Time: two (2) hours.
 - 3.6.1. a) What first-aid is;
 - 3.6.2. b) How first-aid should be administered (treat life threatening conditions first);
- 3.6.3. c) Demonstration and practice of cardiopulmonary resuscitation* (C.P.R. or heart massage and AED);
- <u>3.6.4.</u> d) Demonstration and practice of mouth-to-mouth, mouth-to-mask and bag-valve-mask resuscitation respiration.

Note: *Pending inclusion of C.P.R. in M.E.S.A.'s general first-aid course..

- 3.7. 3.6. General Safety -- Estimated Time: one (1) hour.
- 3.7.1. a) NOTE: General safety includes noncoal mining specific safety procedures, precautions, and practices:
 - 3.7.2. b) Recognition of potential accident-producing situations;
 - 3.7.3. c) Lifting procedures;
 - 3.7.4. d) Proper handling of supplies and materials;
 - 3.7.5. e) Accident causes and prevention;
 - 3.7.6. f) Tool care;
 - 3.7.7. g) Selection of appropriate tools for tasks;
 - 3.7.8. h) Communications.
 - 3.8. 3.7. First-aid--Part II -- Estimated Time: two (2) hours.
- 3.8.1. a) Demonstration and practice Review of Holger-Nielson back pressure mouth-to-mouth, mouth-to-mask and bag-valve-mask methods of artificial respiration;

3.8.2. b) Control of bleeding. 3.9. 3.8. General mine safety -- Estimated Time: one (1) hour. 3.9.1. a) Personal safety equipment; 3.9.2. b) Safety procedures for cleaning coal; 3.9.3. c) Good housekeeping practices. 3.10. 3.9. First-aid--Part III -- Estimated Time: two hours. 3.10.1. a) Practice Review of First-Aid Parts I and II; 3.10.2. b) Treatment of physical shock; 3.10.3. c) Dressing of open wounds. 3.11. 3.10. Heavy equipment safety -- Estimated Time: three (3) hours. 3.11.1. a) Bulldozer safety: 3.11.2. b) Front end loader safety; 3.11.3. c) Slips and falls from equipment; 3.11.4. d) Shovel and dragline safety; 3.11.5. e) Scraper safety; 3.11.6. † Mounting and dismounting shovels and draglines; 3.11.7. g) Pre-operational checks; 3.11.8. h) Safety practices around auger mining equipment; 3.11.9. †) Railroad car safety at tipples preparation plants and loadouts; 3.11.10. j) Drilling machine safety. 3.12. 3.11. First-aid--Part IV -- Estimated Time: two (2) hours. 3.12.1. a) Practice of C.P.R. and artificial respiration control of bleeding and dressing of open wounds; 3.12.2. b) Treatment of burns, closed wounds, strains, sprains, and ruptures. 3.13. 3.12. Haulage safety -- Estimated Time: one (1) hour.

3.13.1. a) Haulage terms;

- 3.13.2. b) Haulage road safety;
- 3.13.3. e) Safe driving on haulage roads;
- 3.13.4. Safety devices on haulage equipment.
- 3.14. 3.13. Preparation plant and tipple loadout safety -- Estimated Time: One (1) hour.
- 3.15. 3.14. First-aid--Part V -- Estimated Time: two (2) hours.
 - 3.15.1. a) C.P.R. and artificial respiration practice;
 - 3.15.2. b) Treatment of fractures and dislocations;
 - 3.15.3. e) Transporting of injured.
- 3.16. 3.15. Welding safety -- Estimated Time: two (2) hours.
 - 3.16.1. a) Welding terms;
 - 3.16.2. b) Welding system components and functions;
 - 3.16.3. c) Safety in handling gas cylinders;
 - 3.16.4. d) Safety when welding near flammable material;
 - 3.16.5. e) Protective equipment for welding.
- 3.17. 3.16. Recognition and avoidance of electrical hazards -- Estimated Time: one (1) hour.
 - 3.17.1. a) Basic electricity;
 - 3.17.2. b) Conductors and nonconductors of electricity:
 - 3.17.3. c) Recognition and prevention of electrical hazards;
 - 3.17.4. d) Removal and treatment of a person in contact with dangerous electrical circuits.
- 3.18. 3.17. First-aid--Part VI -- Estimated Time: two (2) hours.
 - 3.18.1. a) Location of first-aid materials at a surface coal mine;
 - 3.18.2. b) Review and practice of first-aid procedures.
- 3.19. 3.18. Fire prevention and control -- Estimated Time: two (2) hours.
 - 3.19.1. a) Causes of mine fires and explosions;
 - 3.19.2. b) Preventive measures;

- 3.19.3. c) Primary and alternate methods of fire control;
- 3.19.4. d) Demonstration and practice in using a portable fire extinguisher;
- 3.19.5. e) Location of fire fighting materials at the mine.
- 3.20. 3.19. Highwall and spoilbank safety -- Estimated Time: two (2) hours.
 - 3.20.1. a) Terms pertaining to highwall safety;
 - 3.20.2. b) Recognition of highwall hazards;
 - 3.20.3. c) Safety practices for highwall and spoilbanks;
 - 3.20.4. d) Recognition of warning signs of dangerous highwalls and spoilbanks.
- 3.21. 3.20. Explosives and blasting safety -- Estimated Time: two (2) hours.
 - 3.21.1. a) Blasting terms;
 - 3.21.2. b) Safety in handling leadwires;
 - 3.21.3. c) Hazards of thunderstorms to shooting blasting safety;
 - 3.21.4. d) Security for misfired shots;
 - 3.21.5. e) Shot firer's warning,
- 3.22. 3.21. Health and sanitation -- Estimated Time: thirty (30) minutes.
 - 3.22.1. a) Dust hazards;
 - 3.22.2. b) Use of respirator and hearing protection.
- 3.23. 3.22. Summary and debriefing -- Estimated Time: -2-1/2 hours.
 - 3.23.1. a) Review of motor major points;
 - 3.23.2. b) Question and answer problem solving session;
 - 3.23.3. e) Permit of apprenticeship examination.

§48-3-4. Training Objectives For Surface Coal Mine Health and Safety Training Course.

- 4.1. General orientation to surface mining Unit <u>oObjective</u>. <u>4.1.1.</u> Given verbal descriptions or pictures of surface mining terms, methods, procedures and machinery, <u>you</u> the trainee will demonstrate <u>you're their</u> knowledge of correct and incorrect usage of these items to assure health and safety <u>by accomplishing the following training objectives:</u>
 - 4.1.1. 4.1.2. Given a list of verbal descriptions or pictures of two (2) different types of surface coal

mines, you the trainee will match each description or picture with the following types of surface mines: strip mine; auger mine: contour mining, highwall mining and auger mining.

Training Objectives:

4.1.2. 4.1.3. Given verbal descriptions or pictures representing the following terms, you the trainee will correctly match each term with its description or picture. The terms include:

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4.1.2.a. a) Bench;
4.1.2.b. b) Highwall;
4.1.2.c. c) Overburden;
4.1.2.d. d) Pit;
4.1.2.e. e) Reclamation;
4.1.2.f. f) Seam;
4.1.2.g. g) Spoilbank; spoilpile; spoil;
4.1.2.h. h) Tipple Preparation plant and loadout;
4.1.2.i. f) Tram.
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4.1.3. 4.1.4. Given a list of steps for surface mine operations, arranged out of sequence, you the trainee will arrange them in the correct sequence.

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4.1.3.a. a) Clearing surface;

4.1.3.b. b) Drilling;

4.1.3.c. c) Blasting overburden;

4.1.3.d. d) Stripping;

4.1.3.e. e) Clearing coal;

4.1.3.f. f) Shooting Blasting and/or chopping coal;

4.1.3.g. g) Loading coal;

4.1.3.h. h) Hauling coal;

4.1.3.i. t) Preparing coal;

4.1.3.j. j) Reclaiming coal.
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4.1.4. 4.1.5. Given pictures of the following surface mining equipment, you the trainee will correctly

match the pictures with the following terms:

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4.1.4.a. a) Auger;
4.1.4.b. b) Bulldozer;
4.1.4.c. e) Conveyor belt;
4.1.4.d. d) Dragline;
4.1.4.e. e) Drilling machine;
4.1.4.f. f) Front-end loader;
4.1.4.g. g) Grader;
4.1.4.h. h) Haulage trucks;
4.1.4.i. f) Scraper (pan);
4.1.4.i. j) Shovel;
4.1.4.k. k) Supporting service trucks;
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4.2. General safety — Unit Objectives— 4.2.1. Given pictures of safe and unsafe surface mining tools and procedures, you the trainee will select the safe tools and procedures by accomplishing the following training objectives.

Training Objectives:

4.2.1. 4.2.2. Given pictures of hand tools in safe and unsafe conditions, you the trainee will correctly identify tools in a safe condition. Unsafe conditions include:

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4.2.1.a. a) Mushroomed or cracked heads;
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4.2.1.b. b) Jagged edges;

4.2.1.c. e) Cracked handles;

4.1.4.l. + Highwall + miners.

4.2.1.d. d) Broken points;

4.2.1.e. e) Dull edge or point;

4.2.1.f. f) Damaged insulation on electrical tools.

4.2.2. 4.2.3. Given pictures of mining accidents, you the trainee will match each picture to the basic type of accident. Five (5) basic types of accidents are:

- 4.2.2.a. a) Struck by;
- 4.2.2.b. b) Struck against;
- 4.2.2.c. e) Caught between, in or on;
- 4.2.2.d. d) Strain or sprain;
- 4.2.2.e. e) Exposure to harmful conditions.
- 4.2.3. 4.2.4. Given pictures of accidents resulting in injuries to the fingers or hands and the following list of preventive measures, you the trainee will select the correct procedure to prevent such accidents. Preventive measures include:
 - 4.2.3.a. a) Inspect materials for sharp or jagged edges, burrs, and rough or slippery surfaces.;
 - 4.2.3.b. b) Grip objects firmly;
 - 4.2.3.c. e) Keep fingers away from pinch points;
 - 4.2.3.d. d) Wipe greasy, wet, slippery, or dirty objects before handling them:
 - 4.2.3.e. e) Keep hands free of oil and grease;
 - 4.2.3.f. f) Coordinate each working movement with fellow workmen workers;
 - 4.2.3.g. g) Use the proper tool for the job. Do not improvise;
 - 4.2.3.h. h) Keep hands away from moving machinery;
- 4.2.3.i. †) Wear non-ragged gloves for hand protection only when gloves are not themselves a hazard-;
 - 4.2.3.j. j) Wear snug-fitting clothes.
- 4.2.4. 4.2.5. Given pictures of correct and incorrect procedures for lifting objects, you the trainee will identify the correct procedures. The correct procedures include:
 - 4.2.4.a. a) Keep feet parted--one (1) alongside, one (1) behind the object;
 - 4.2.4.b. b) Keep back straight;
 - 4.2.4.c. e) Tuck chin in;
 - 4.2.4.d. d) Grip object with whole entire hand;
 - 4.2.4.e. e) Tuck elbows and arms in;
 - 4.2.4.f. f) Keep body weight positioned directly over feet.

- 4.2.5. Given correct and incorrect examples of asking for instructions and giving instructions, you the trainee will select correct examples.
- 4.3. General mining safety: Unit Objective: 4.3.1. Given appropriate examples or cues, you the trainee will demonstrate you're their ability to perform standard safety practices and procedures, and to recognize and respond correctly to commonly found surface mine conditions.
- 4.3.1. 4.3.2. Given pictures of assorted personal mine equipment and clothing, you the trainee will select the appropriate items for work at a surface mine. Appropriate items include:
 - 4.3.1.a. a) Hard hat;
 - 4.3.1.b. b) Safety shoes or toed boots;
 - 4.3.1.c. e) Snug-fitting clothing and long hair control;
 - 4.3.1.d. d) Safety glasses or goggles;
 - 4.3.1.e. e) Respirators;
 - 4.3.1.f. f) Hearing Pprotection;
- <u>4.3.1.g.</u> g) Non-ragged correctly to commonly found surface mine conditions gloves that conform to the conditions of the surface mine.
- <u>4.3.2.</u> Given verbal descriptions of common tasks performed at the surface mine and pictures of common hand tools, you the trainee will match each task with the proper tool or tools to accomplish it. Examples include:
 - 4.3.2.a. a) Sledge hammer-track work at tipple preparation plant and loadout;
 - 4.3.2.b. b) Railroad jacks--close railroad cars;
 - 4.3.2.c. e) Hand shovel--clean cars and coal;
 - 4.3.2.d. d) Pick--working inside bin;
 - 4.3.2.e. e) Axes--cutting timber;
 - 4.3.2.f. f) Hand tools--mechanical work;
 - 4.3.2.g. g) Hand tools--electrical work.
- 4.3.3. 4.3.4. Given verbal descriptions of correct and incorrect procedures for cleaning coal, you the trainee will identify the correct procedures. Correct procedures include:
 - 4.3.3.a. a) Be alert for moving equipment;
 - 4.3.3.b. b) Pay close attention to highwall and spoilbank, especially if coal is being shot.

- 4.3.4. 4.3.5. Given pictures of correct and incorrect housekeeping practices that relate to slips, falls, and fire hazards, you the trainee will select the correct pictures.
- 4.4. Recognition and avoidance of electrical hazards: Unit Objective: 4.4.1. Given verbal information or pictures, you the trainee will demonstrate you're their knowledge of electrical hazards and related safety procedures and practices. You They will also demonstrate knowledge and understanding of common terms concerning surface mine electrical systems: by accomplishing the following training objectives.

Training Objectives:

4.4.1. 4.4.2. Given verbal descriptions or pictures representing the following terms, you the trainee will match each term with its description or picture.

4.4.1.a. a) Electrical conductor;

4.4.1.b. b) Ground/Grounding;

4.4.1.c. c) Electrical insulation;

4.4.1.d. d) Power cables;

4.4.1.e. Dry insulated mat where shock hazards exist;

4.4.1.f. Emergency stop button on distribution box location and function.

- <u>4.4.2.</u> 4.4.3. Given pictures illustrating correct and incorrect methods of removing a person from contact with a dangerous electrical circuit, you the trainee will select the correct methods.
- 4.4.3. 4.4.4. Given pictures of electrical accidents and verbal descriptions of causes, you the trainee will match each accident with it's its cause. These causes include:

4.4.3.a. a) Improper grounding of electrical machinery;

4.4.3.b. b) Failure to wear proper protective equipment;

4.4.3.c. e) Failure to cut power on the system before starting repair;

4.4.3.d. d) Inattention to existence of power line near work areas;

- 4.4.3.e. e) Performing of electrical repair and maintenance tasks by unauthorized or unqualified people.
- 4.5. Fire prevention and control: Unit Objective: 4.5.1. Given appropriate cues and illustrated examples, you the trainee will demonstrate an understanding of surface mine fire hazards and their control. You The trainee will demonstrate you're their knowledge of the rules pertaining to the location and operation of fire fighting equipment and you're their ability to apply that knowledge appropriately by accomplishing the following training objectives.

Training Objective:

- 4.5.1. 4.5.2. Given pictures or verbal descriptions of potential fire hazards, you the trainee will select those hazards at the surface mine. Potential fire hazards include:
 - 4.5.1.a. a) Open flame;
 - 4.5.1.b. b) Electrical failures;
 - 4.5.1.c. e) Inadequately maintained equipment or equipment failure;
 - 4.5.1.d. d) Improper equipment refueling methods.
- 4.5.2. 4.5.3. Given pictures or verbal descriptions of locations of a surface mine, you the trainee will select those locations where the law requires storage of fire fighting equipment. These locations are:
 - 4.5.2.a. a) Mobile Eequipment;
 - 4.5.2.b. b) Temporary and permanent electrical installations;
 - 4.5.2.c. e) Oil storage areas;
 - 4.5.2.d. d) Welding, cutting, and soldering areas;
 - 4.5.2.e. e) All floors of a Tipple preparation plant or loadout;
 - 4.5.2.f. Refueling areas;
 - 4.5.2.g. Explosive storage areas.
- 4.5.3. 4.5.4. Given correct and incorrect statements concerning general principles of fire fighting, you the trainee will select the correct statements. Correct statements include:
 - 4.5.3.a. a) Warn Notify fellow workers and sound fire alarm if there is evidence of a fire;
 - 4.5.3.b. b) Know the location and use of available fire fighting equipment;
 - 4.5.3.c. e) Shut off power in case of an electrical fire;
- 4.5.3.d. d) Direct stream of water or chemical at the base of the fire (not in the case of an oil or gas on water fire);
- $\underline{4.5.3.e.}$ Apply water or chemical in a rapid sweeping action starting at the edge of the fire and working inward;
 - 4.5.3.f. †) Keep yourself from being cut off by the fire so that you can retreat if necessary:
 - 4.5.3.g. g) Do not enter a smoke filled area.
- 4.6. Heavy equipment safety—— Unit Objective—— 4.6.1. Given written statements or pictures of working conditions on or near surface mine heavy equipment, you the trainee will recognize safe surface mine practices and demonstrate you're their knowledge of safety principles and procedures—by accomplishing

the following training objectives.

Training Objective:

- <u>4.6.1.</u> Given pictures of verbal descriptions of safe and unsafe practices for operating bulldozers, you the trainee will select the safe practices. These practices include:
 - 4.6.1.a. a) Keep the dozer safe distances from an overhanging edge;
 - 4.6.1.b. b) Keep a safe distance from the edge of a highwall or embankment;
 - 4.6.1.c. c) Exercise extreme caution when working or trimming tramming on steep slopes;
 - 4.6.1.d. d) Only operate equipment you are familiar with and authorized to operate;
 - 4.6.1.e. e) Use caution when working near trees so that branches do not whip back on you;
 - 4.6.1.f. f) Use caution when trimming tramming backwards;
 - 4.6.1.g. g) Pay attention to task at hand.
- 4.6.2. 4.6.3. Given pictures or verbal descriptions of safe and unsafe practices for operating fromend front-end loaders, you the trainee will select the safe practices. These practices include:
 - 4.6.2.a. a) Travel downgrades at safe speeds;
- 4.6.2.b. b) Use caution when trimming tramming over wet, frozen or rutted surfaces; and loose areas around the edges;
 - 4.6.2.c. c) Only operate equipment that you are familiar with and are authorized to operate;
 - 4.6.2.d. d) Pay attention and know where others are at all times.
- 4.6.3. 4.6.4. Given pictures of conditions associated with heavy equipment, you the trainee will select the conditions that could cause slips or falls.
- <u>4.6.4.</u> 4.6.5. Given pictures or verbal descriptions of safe and unsafe practices for working around shovels and draglines, you <u>the trainee</u> will select the safe practices. Safe practices include:
 - 4.6.4.a. a) Place yourself in a safe position when performing maintenance;
 - 4.6.4.b. b) Repair or inspect equipment when it is not operating;
 - 4.6.4.c. c.) Be sure your clothes are snug-fitting so you are not caught on moving equipment.
- 4.6.5. Given pictures or verbal description of safe and unsafe practices for working around drilling machines, you the trainee will select the safe practices. These practices include:
 - 4.6.5.a. a) Use a respirator and safety glasses at all times;

- 4.6.5.b. b) Keep the boom in a safe position when trimming tramming;
- 4.6.5.c. e) Keep your hands and fingers out of pinch points.
- <u>4.6.6.</u> 4.6.7. Given pictures or verbal descriptions of correct and incorrect methods of mounting and dismounting draglines and shovels, you <u>the trainee</u> will select the correct methods. The correct methods include:
 - 4.6.6.a. a) Notify operator before mounting or dismounting;
 - 4.6.6.b. b) Use ladders when required;
 - 4.6.6.c. c) Never put your hands on the track.
- 4.6.7. 4.6.8. Given correct and incorrect statements of the pre-operational checks that should be performed on equipment, you the trainee will select the correct checks. Correct checks include:
 - 4.6.7.a. a) Check tires for proper inflation and safe condition;
 - 4.6.7.b. b) Check for required safety equipment on machine (guards on fans, fire extinguisher);
 - 4.6.7.c. e) Secure loose items;
 - 4.6.7.d. d) Check steering system for proper operation:
 - 4.6.7.d.1. 1) Service system;
 - 4.6.7.d.2. 2) Emergency system;
 - 4.6.7.e. e) Check braking system for proper operation:
 - 4.6.7.e.1. 1) Service system;
 - 4.6.7.e.2. 2) Parking brake;
 - 4.6.7.e.3. Emergency brake;
 - 4.6.7.f. f) Check windows:
 - 4.6.7.f.1. 1) Clean;
 - 4.6.7.f.2. 2) View not blocked by cracks;
 - 4.6.7.g. g) Check air pressure for proper operating range;
 - 4.6.7.h. h) Check fluid levels:
 - 4.6.7.h.1. 1) Hydraulic oil;
 - 4.6.7.h.2. 2) Engine oil;

4.6.7.h.3. 3) Coolant;

4.6.7.h.4. Fuel;

4.6.7.i. +) Check visibility aids for good condition:

4.6.7.i.1. 1) Mirrors;

4.6.7.i.2. 2) Headlights and running lights;

4.6.7.i.3. 3) Warning lights or flashers;

4.6.7.i.4. Cameras or collision avoidance, if equipped;

4.6.7.j. i) Check backup alarm/lights for operation;

4.6.7.k. k) Report to proper authority when a malfunction occurs that requires shop maintenance;

4.6.7.l. + All gauge readings correct:

4.6.7.l.1. 1) Engine temperature;

4.6.7.I.2. 2) Engine oil pressure and temperature;

4.6.7.l.3. 3) Transmission oil pressure and temperature;

4.6.7.l.4. 4) Hydraulic pressure.

<u>4.6.8.</u> Given pictures of machines that have been prepared safely or unsafely for maintenance work, you the trainee will select those that are safely prepared. The safe preparations include:

4.6.8.a. a) Machine on level, dry ground, and away from traffic;

4.6.8.b. b) Wheels or tracks blocked;

4.6.8.c. \leftrightarrow Buckets or blades supported with blocks, when raised for work:

4.6.8.d. d) Raised truck beds secured with safety pins, safety bars, cables or blocked;

4.6.8.e. Lock out and tag out on electrical, pneumatic and mechanical energy sources;

4.6.8.f. When removing the power alone will not ensure against unintentional movement, the machinery shall be physically blocked, in addition to removing the power. Physical blocking may be achieved by the use of devices such as bars, chocks, clamps, etc.

<u>4.6.9.</u> 4.6.10. Given pictures or verbal descriptions of precautions to be taken when working on or near auger mining equipment, you the trainee will select appropriate precautions. Precautions include:

4.6.9.a. a) Be clear when the operator moves the auger;

- 4.6.9.b. b) Take precautions against falling off the auger machine or into the flight conveyor;
- 4.6.9.c. c) Check highwall and spoilbank conditions frequently;
- 4.6.9.d. d) Assure clothes are snug fitting;
- 4.6.9.e. e) Never smoke around auger holes;
- 4.6.9.f. f) Test for methane regularly.
- <u>4.6.10.</u> 4.6.11. Given verbal descriptions of pictures of correct and incorrect practices when operating or working close to scrapers (pans), you the trainee will select the correct practices. The correct practices include:
 - 4.6.10.a. a) Check loading area, haul road and fill area for dangerous conditions;
 - 4.6.10.b. b) Travel with pan close to the ground;
 - 4.6.10.c. c) When parking or not working, lower the pan to the ground.
- <u>4.6.11.</u> Given pictures or verbal descriptions of safe and unsafe practices for oilers or draglines and shovels, you the trainee will select the safe practices. These safe practices include:
 - 4.6.11.a. a) Grease shovels and draglines when machine is not in operation;
 - 4.6.11.b. b) Only one (1) person should do signaling;
 - 4.6.11.c. c) Mount and dismount equipment only when stopped.
- 4.6.12. 4.6.13. Given pictures or verbal descriptions of safe and unsafe practices <u>before</u> entering auger holes, you the trainee will select the safe practices. Safe practices include:
- 4.6.12.a. a) A certified person will examine the face of the highwall for a distance of at least twenty-five (25) feet on each side of the auger hole immediately before any person enters the hole. Any hazards found will be corrected before any persons enter the auger hole.
- 4.6.12.b. b) A responsible person will be assigned to observe the highwall for possible movement while any person is entering or is in the auger hole.
- 4.6.12.c. e) A qualified person will test for oxygen deficiency and methane with an approved type testing device at the collar of the hole before any persons enter.
- 4.6.12.d. d) Only a qualified person will be allowed to enter an auger hole and frequent tests for methane and oxygen deficiency will be made in the hole with approved type devices. If more than two percent (2%) of methane or less than nineteen and five tenths percent (19.5%) of oxygen is found, no further work will be performed in the hole until the atmosphere has been made safe.
- 4.6.12.e. e) The person entering the hole will wear a lifeline that extends to the hands of a person on the surface who will be someone other than the person assigned to observe the highwall.

- 4.6.12.f. f) The person entering the hole will examine and test the interior surfaces for dangers from falling materials. Any hazards found will be corrected immediately or the hole will be vacated.
- 4.6.12.g. h) Internal combustion engines in the vicinity of the auger hole will be stopped while any person is entering, exiting, or in the hole.
- 4.6.12.h. †) The results of the examination and action taken, date, time, and reasons for entering the hole will be recorded in a book, which shall be kept at the mine.
- 4.7. 4.6. Haulage safety— Unit Objective— 4.7.1. Given appropriate examples and cues, you the trainee will demonstrate understanding of the safety rules, practices and procedures pertaining to surface mine haulage operations and equipment.
- 4.7.1. 4.7.2. Given verbal descriptions or pictures representing the following terms, you the trainee will correctly match each term with it's its description or picture.
 - <u>4.7.1.a.</u> a) Haulage<u>;</u>
 - 4.7.1.b. b) Haulage road;
 - 4.7.1.c. c) On-road haulage;
 - 4.7.1.d. d) Off-road haulage.
- 4.7.2. Given appropriate examples and cues, the trainee will demonstrate an understanding of the safety rules, requirements and procedures pertaining to safety devices on surface haulage equipment.
 - 4.7.2.a. Strobe lights and/or whip antennas;
 - 4.7.2.b. Equipment walk around inspection;
 - 4.7.2.c. Sounding of audible warning device;
 - 4.7.2.d. Proper Identification markers;
 - 4.7.2.e. 2- way communications;
 - 4.7.2.f. Approaching greater than 100- ton haulage vehicles;
 - 4.7.2.g. When cameras are required.
- 4.7.3. Given appropriate examples and cues, you will demonstrate understanding of the safety rules, practices, and procedures pertaining to surface mine haulage operations and equipment.
 - 4.7.3.1. a) Driving too fast;
 - 4.7.3.2. b) Limited visibility;
 - 4.7.3.3. c) Steep grades;

- 4.7.3.4. d) Making first trip of the day or first trip into a new area;
- 4.7.3.5. e) Tailgating.
- 4.7.4. Given pictures or verbal descriptions of good and bad haulage road characteristics, you <u>the</u> <u>trainee</u> will select the good characteristics. Good characteristics include:
 - 4.7.4.a. a) Sufficient haulage road width;
 - 4.7.4.b. b) Adequate road drainage;
 - 4.7.4.c. e) Proper road maintenance;
 - 4.7.4.d. d) Free from obstructions and debris;
 - 4.7.4.e. e) Adequate signs and markings.
- 4.7.5. Given verbal statements or pictures representing correct and incorrect haulage road rules and practices, you the trainee will select the correct rules or practices. Correct rules and practices include:
 - 4.7.5.a. a) Loaded trucks have the right-of-way;
 - 4.7.5.b. b) Park where other vehicles can pass easily;
 - 4.7.5.c. c) Pass only when permitted and where vehicle power allows.
- 4.8. Preparation plant and tipple loadout safety: -- Unit Objective: Given appropriate verbal, written, and pictorial examples of safety precautions and practices to use when working in or around tipples or preparation plants and loadouts, you the trainee will demonstrate you're their knowledge and understanding of these precautions and practices by accomplishing the following training objectives.

Training Objectives:

- 4.8.1. 4.8.2. Given verbal descriptions or pictures representing the following terms, you the trainee will correctly match each term with its description or picture.
 - 4.8.1.a. a) Tipple Loadout;
 - 4.8.1.b. b) Bin;
 - 4.8.1.c. e) Preparation plant;
 - 4.8.1.d. d) Car dropper;
 - 4.8.1.e. e) Belt takeup;
 - 4.8.1.f. f) Belt drive.
 - g) Slate Picker

- 4.8.2. 4.8.3. Given pictures of tipple preparation plant and loadout equipment, you the trainee will select the equipment that is the main cause of accidents to miners. The correct selection is conveyor belts.
- 4.8.3. 4.8.4. Given safe and unsafe practices related to slips and falls at the tipple preparation plant or loadout, you the trainee will select the safe practices. Safe practices include:
 - 4.8.3.a. a) Exercise caution when walking on icy or wet surfaces;
 - 4.8.3.b. b) Use handrails;
 - 4.8.3.c. + Keep walkways clear and free of stumbling hazards;
 - 4.8.3.d. d) Never jump off an elevated area.
- <u>4.8.4.</u> <u>4.8.5.</u> Given verbal descriptions or pictures of correct and incorrect ways of assuring electrical equipment has been locked out <u>and tagged</u> and made safe prior to maintenance, you <u>the trainee</u> will select the correct ways.
- <u>4.8.5.</u> Given verbal descriptions or pictures of correct and incorrect procedures when crossing conveyor belts, you the trainee will select the correct procedures.
- <u>4.8.6.</u> <u>4.8.7.</u> Given pictures of correct and incorrect procedures for shoveling coal onto a conveyor belt, you the trainee will select the correct procedures. Correct procedures include:
 - 4.8.6.a. a) Work facing the direction of belt travel;
 - 4.8.6.b. b) Keep clothes sung snug-fitting so that they won't catch on belt;
 - 4.8.6.c. e) Turn belt off before shoveling coal from under belt head <u>unless adequately guarded</u>;
 - 4.8.6.d. d) Keep guards in place at the belt head or tail drive;
 - 4.8.6.e. e) Keep long hair confined to prevent it from being caught by moving parts.
- 4.8.7. 4.8.8. Given verbal descriptions or pictures of safe and unsafe practices when working with railroad cars at tipples preparation plants or loadouts, you the trainee will select the safe practices. Safe practices are:
 - 4.8.7.a. a) Assume a safe body position;
 - 4.8.7.b. b) Position yourself where you can operate the brake on either car when possible;
 - 4.8.7.c. e) Assure coupler alignment is correct;
 - 4.8.7.d. d) Maintain adequate clearance between the edge of the car and obstacles;
 - 4.8.7.e. e) Pay attention and notify others of changes in operational routine;
 - 4.8.7.f. f) Assure brakes are set on remaining cars when dropping operations begin.

4.9. Miner and operator rights and responsibilities: — Unit Objective; 4.9.1. Given appropriate operator and miner rights and responsibilities governing current UMW contract, grievance procedures and company rules and regulations, you will demonstrate your ability to recognize and understand them as they pertain to a new surface miner pursuant to the Federal Mine Safety and Health Act of 1977, the Mine Improvement and New Emergency Response Act of 1006 (MINER Act), and Title 30 of the Code of Federal Regulations (30 CFR), the trainee will recognize and understand them. governing current UMW contract, grievance procedures and company rules and regulations, you will demonstrate your ability to recognize and understand them as they pertain to a new surface miner. Additional rights and responsibilities found in contractual or company policy may also be incorporated into this training unit. (NOTE: The following objectives are suggested for possible inclusion in a training program and, as such, are not included in the criterion test package.)

Training Objectives:

- 4.9.1. 4.9.2. Given correct and incorrect statements regarding operator responsibilities to the miners' employment, health, and safety as specified in the 1974 Bituminous Wage Agreement, you will select the correct statements. Correct statements include: Given correct and incorrect statements regarding operator responsibilities pursuant to federal law, the trainee will select the correct statements. Correct statements include:
 - 4.9.1.a. a) Provide a safe and healthful place to work.;
 - 4.9.1.b. b) Provide continuous employment-;
- 4.9.1.c. c) Provide supervision so that employees can work safely, and men employees and equipment can work efficiently;
- 4.9.1.d. d) Provide sufficient supplies and materials at proper locations for the employees' safety and safety of the equipment.
 - 4.9.1.e. e) Provide specific job training.

Training Objectives:

- 4.9.3. Given correct and incorrect statements regarding miners' responsibilities to his employment, health and safety, you will select the correct statements. Correct statements include:
 - a) The miner is responsible to:
 - b) Work with operator in making the mine a safe and healthy place to work
 - c) Supply the labor and know how to properly operate equipment and other work
 - d) Protect and safeguard the company's equipment and property
 - e) Comply with company rules and state and federal laws
 - f) Work regularly
 - 4.9.2. 4.9.3. Given correct and incorrect statements regarding miners' responsibilities to their

employment, health, and safety, the trainee will select the correct statements. Correct statements include:

- 4.9.2.a. Work with the operator in making the mine a safe and healthy place to work;
- 4.9.2.b. Supply the labor and know how to properly operate equipment and other work;
- 4.9.2.c. Protect and safeguard the company's equipment and property;
- 4.9.2.d. Comply with company rules and state and federal laws;
- 4.9.2.e. Work regularly.
- 4.9.3. 4.9.4. Given correct and incorrect statements regarding grievance procedures for settlement of health or safety disputes as specified in the 1974 Bituminous Wage Agreement an applicable United Mine Workers' of America Wage Agreement, you the trainee will select the correct statements.
- 4.9.4. 4.9.5. Given correct and incorrect statements regarding discharge procedures as specified in the 1974 Bituminous Wage Agreement, an applicable United Mine Workers' of America Wage Agreement, you the trainee will select the correct statements.
- 4.9.5. 4.9.6. Given correct and incorrect statements regarding the following employee benefits as specified in the 1974 Bituminous Wage Agreement, an applicable United Mine Workers' of America Wage Agreement, you the trainee will select the correct statements. Benefits include:

4.9.5.a. a) Bereavement pay;

4.9.5.b. b) Jury duty;

4.9.5.c. e) Reporting pay;

4.9.5.d. d) Sick pay;

4.9.5.e. e) Vacations;

4.9.5.f. f) Paid holidays;

4.9.5.g. g) Clothing allowance.

4.10. State and federal laws and regulations— Unit Objective— 4.10.1. Given the appropriate cues, you the trainee will demonstrate you're their knowledge and understanding of the laws and regulations pertaining to the certification of miners, health and safety standards and inspection for surface mines by accomplishing the following training objectives.

Training Objectives:

- 4.10.1. 4.10.2. Given correct and incorrect statements or pictures representing the law pertaining to smoking, smoking materials or intoxicants, you the trainee will select the correct picture or statement.
- 4.10.2. 4.10.3. Given correct and incorrect statements regarding the requirements for a permit of apprenticeship, you the trainee will select the correct statements. Permit requirements include:

- 4.10.2.a. a) Completion of a forty (40) hour course of instruction in surface mining:
- <u>4.10.2.b.</u> Satisfactory completion of an examination conducted by the West Virginia Department of Energy Office of Miners' Health, Safety and Training.
- 4.10.3. 4.10.4. Given correct and incorrect statements regarding certification requirements, you the trainee will select the correct statements. Certification requirements include:
 - 4.10.3.a. a) At least six (6) months experience and one hundred eight (108) shifts;
- <u>4.10.3.b.</u> Successful completion of an examination conducted by the West Virginia Department of Energy Office of Miners' Health, Safety and Training.
- 4.10.4. 4.10.5. Given correct and incorrect statements about the penalties prescribed by law for willful violations of any health and safety standard by a miner or an operator, you the trainee will select the correct statements.
- <u>4.10.5.</u> Given correct and incorrect statements regarding mining related job titles, which include responsibility for inspection of surface coal mines, you the trainee will select the correct statements. This list includes state and federal officials, safety committeemen and company officials.
- 4.10.6. 4.10.7. Given correct and incorrect statements about employment regulations which apply to employment as an apprentice miner (red hat) at a surface mine, you the trainee will select the correct statements.
- 4.10.6.a. a) An apprentice must wear a red hat for six (6) months to identify him/her as an inexperienced miner;
- 4.10.6.b. b) An apprentice must be under the immediate supervision of a certified miner or certified mine foreman.
- 4.10.7. 4.10.8. Given correct an and incorrect statements about the term immediate supervision, you the trainee will select the correct statements.
- 4.11. Welding safety :-- Unit Objective: 4.11.1. Given verbal descriptions or pictures of welding systems and components found at the surface mines, you the trainee will recognize and understand their function. You The trainee will also recognize the safe practices that prevent injury to welders and to others who work around cutting or welding operations by accomplishing the following training objectives.

Training Objectives:

 $\underline{4.11.1.}$ Given verbal descriptions or pictures representing the following terms, $\underline{\text{you}}$ the trainee will match each term with its description or picture. The terms are:

4.11.1.a. a) Gas welding;

4.11.1.b. b) Arc welding;

4.11.1.c. c) Cutting;

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4.1.11.d. <del>d)</del> Flash burn.
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 $\underline{4.11.2.}$ Given verbal descriptions or pictures of the basic gas welding system and statements about the components' functions, \underline{you} the trainee will match each component with its function. The components are:

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4.11.2.a. a) Oxygen cylinder;

4.11.2.b. b) Fuel gas cylinder;

4.11.2.c. c) Pressure reducing regulator and back flow check valves;

4.11.2.d. d) Hoses;

4.11.2.e. e) Torch.
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4.11.3. 4.11.4. Given correct and incorrect verbal statements concerning how to safely open and close valves and to use gas welding equipment, you the trainee will select the correct statements.

4.11.4. Given pictures or verbal descriptions of safe and unsafe methods of handling compressed gas cylinders, you the trainee will select the safe methods.

4.11.5. Given verbal descriptions or pictures of safe and unsafe materials placed near welding operations, you the trainee will identify the unsafe materials. The unsafe materials include:

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4.11.5.a. a) Flammable gas;

4.11.5.b. b) Fuel vapors (gasoline);

4.11.5.c. c) Liquids (gasoline; oil);

4.11.5.d. d) Dust (coal dust).
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4.11.6. 4.11.7. Given pictures of welders and helpers dressed properly and improperly, you the trainee will select those dressed properly.

4.12. Highwall and spoilbank safety: __ Unit Objective: _ 4.12.1. Given appropriate cues, you the trainee will demonstrate you're their understanding and recognition of the terms associated with highwall and spoilbank safety hazards, precautions, and procedures by accomplishing the following training objectives.

Training Objectives:

4.12.1. Given verbal descriptions or pictures representing the following terms, you the trainee will match each term with its description or picture. The terms include:

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4.12.1.a. a) Scaling;
4.12.1.b. b) Undercutting;
4.12.1.c. e) Weathering;
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4.12.1.d. d) Crack;

4.12.1.e. e) Slip.

4.12.2. Given pictures of highwall hazards and statements describing the hazards, you the trainee will match each picture with the correct statement. Statements include:

4.12.2.a. a) Freezing and thawing of a highwall;

4.12.2.b. b) Loose material in a highwall;

4.12.2.c. e) Overhanging trees or material on top of a highwall;

4.12.2.d. d) Cracks in a highwall;

4.12.2.e. + Heavy rain causing erosion of a highwall;

4.12.2.f. f) Presence of auger holes or deep mines in or at a highwall.

4.12.3. 4.12.4. Give verbal descriptions or pictures of safe and unsafe practices near highwalls and spoilbanks, you the trainee will select the safe practices. Safe practices include:

4.12.3.a. a) Proper highwall inspection;

4.12.3.b. b) Safe body position;

4.12.3.c. c) Constant attention.

4.12.4. 4.12.5. Given pictures of correct and incorrect warning signs that precede falls of highwalls or spoilbanks, you the trainee will select the correct signs. Signs include:

4.12.4.a. a) Falling material (working);

4.12.4.b. b) Visual movement of spoilbank (will be slow at first);

4.12.4.c. e) Cracks in the highwall;

4.12.4.d. d) Content of material in spoilbank (if more than fifty percent (50%) of spoil is sand or other fine material, its condition is likely to be unstable).

4.13. Explosives and blasting safety—— Unit Objective— 4.13.1. Given visual and verbal presentations of safe blasting methods and procedures, you the trainee will demonstrate you're their ability to recognize correct shooting and handling procedures and methods by accomplishing the following training objectives.

Training Objectives:

4.13.1. 4.13.2. Given verbal descriptions or pictures representing the following terms, you the trainee will match each term with its description or picture. These terms include:

4.13.1.a. a) Blasting cap;

- 4.13.1.b. b) Fertilizer ANFO (blasting agent);
- 4.13.1.c. e) Primer cord;
- 4.13.1.d. d) Magazine;
- 4.13.1.e. e) Detonator.
- 4.13.2. 4.13.3. Given verbal descriptions or pictures of safe and unsafe practices in handling lead wires, you the trainee will select the safe practices. Safe practices include:
 - 4.13.2.a. a) Lead wires protected from power conductors;
 - 4.13.2.b. b) Lead wires beyond twenty feet (20') from bare power lines;
 - 4.13.2.c. c) Lead wires protected from thunderstorms and lightning.
- 4.13.3. 4.13.4. Given correct and incorrect statements that explain why lead wires are to be kept electrically connected together prior to shooting, you the trainee will select the correct statements.
- 4.13.4. 4.13.5. Given correct and incorrect statements of the steps to be taken in the event of a misfired shot, you the trainee will select the correct statements.
- 4.13.5. 4.13.6. Given correct and incorrect examples of actions to be taken upon hearing the shot firer's blaster's signal, you the trainee will select the appropriate action to be taken.
- 4.13.6. 4.13.7. Given correct and incorrect statements that identify the hazards created by overshooting an and undershooting overburden, you the trainee will select the correct statements. The correct statements are:
- 4.13.6.a. a) The fractures fractured material in new highwall creates a potential rock fall hazard—:
- 4.13.6.b. b) The new face is broken, causing weathering to accelerate and increasing rock fall possibility.
- 4.13.7. 4.13.8. Given correct and incorrect statements regarding the operation of two-way radio equipment near blasting areas, you the trainee will select the correct statements. Correct statements include:
- 4.13.7.a. a) Two-way radio equipment shall be turned off prior to the handling and use of electric detonators;
- 4.13.7.b. b) Turn off two-way radio within six three hundred fifty feet (650' 350') of a blasting area.
- 4.14. Health and sanitation: Unit Objective: 4.14.1. Given appropriate cues and visual or verbal examples, you the trainee will demonstrate you're their understanding of the hazards of; and protection against coal dust and excessive noise at the surface mines by accomplishing the following training objectives.

Training Objectives:

<u>4.14.1.</u> Given verbal descriptions or pictures representing the following terms, you <u>the</u> <u>trainee</u> will match each term with its description or picture. The terms are:

4.14.1.a. a) Personal dust sampler;

4.14.1.b. b) Respirable dust;

4.14.1.c. c) Respirator.

<u>4.14.2.</u> 4.14.3. Given verbal descriptions or pictures of correct and incorrect procedures for using a respirator, you the trainee will select the correct procedures.

4.14.3. 4.14.4. Given correct and incorrect statements regarding prolonged exposure to high noise levels, you the trainee will select the correct statements that indicate prolonged exposure to high noise levels can cause damage to you're their hearing.

4.15. First-Aid — Unit Objective: 4.15.1. Given the proper cues, verbal descriptions or pictures, or supplies and equipment, you the trainee will demonstrate you're their knowledge of and ability to administer emergency medical attention when it is required. You The trainee will demonstrate you're their ability to recognize and correctly define common terms relating to the certain emergency medical procedures properly and in correct sequence by accomplishing the following training objectives.

Training Objectives:

4.15.1. 4.15.2. Given verbal descriptions or pictures of the following terms, you the trainee will correctly match each term with its description or picture. The terms are:

4.15.1.a. a) CPR/AED and Aartificial respiration;

4.15.1.b. b) First-Aid;

4.15.1.c. c) Fainting;

4.15.1.d. d) Open wounds;

4.15.1.e. e) Abrasions;

4.15.1.f. f) Dislocation;

4.15.1.g. g) Simple Closed fracture;

4.15.1.h. h) Compound Open fracture;

4.15.1.i. + Splint;

4.15.1.j. j) Pressure points;

4.15.1.k. k) Closed wounds;

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4.15.1.l. †) Strains;
4.15.1.m. m) Sprains;
4.15.1.n. n) Rupture (hernia);
4.15.1.o. o) 1st, 2nd, & 3rd degree burns;
4.15.1.p. p) Scalds;
4.15.1.q. q) Incision;
4.15.1.r. r) Laceration;
4.15.1.s. s) Puncture wound;
4.15.1.t. t) Bruises;
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4.15.2. 4.15.3. Given the following steps for administering first aid, arranged out of sequence, you the trainee will arrange them in correct sequence.

4.15.2.a. a) Locate the injury;

4.15.1.u. u) Shock.

4.15.2.b. b) If needed, give artificial respiration;

4.15.2.c. c) Look for and control bleeding;

4.15.2.d. d) Treat for physical shock;

4.15.2.e. e) Treat wounds and burns;

4.15.2.f. † Look for fractures and apply appropriate treatment;

4.15.2.g. g) Transport patient.

4.15.3. 4.15.4. Given an appliance used for artificial respiration practice, you the trainee will correctly demonstrate:

4.15.3.a. a) Mouth-to-mouth artificial respiration;

4.15.3.b. b) Back pressure Mouth-to-mask and bag-valve-mask methods of artificial respiration.

4.15.4. 4.15.5. Given a chart of the human body with various points marked on it, you the trainee will select the points that represent pressure points.

4.15.5. Given a chart of the human body marked with locations of serious wounds and possible pressure points, you the trainee will select the correct pressure point to control bleeding for each wound.

- 4.15.6. 4.15.7. Given pictures of the steps in applying a tourniquet, arranged out of sequence, you the trainee will arrange them in correct sequence. The correct sequence of steps for applying a tourniquet are:
 - 4.15.6.a. a) Use a strong, wide piece of cloth;
- 4.15.6.b. b) Select a solid, padded object and wrap the arm or leg with it next to the arterial pressure point;
 - 4.15.6.c. e) Tie a half knot on the distal portion (away from center of body) of the arm or leg;
 - 4.15.6.d. d) Insert a strong stick over the half knot and tie it in place;
 - 4.15.6.e. e) Twist the stick to apply pressure until bleeding slows stops;
 - f) Loosen tourniquet after ten (10) minutes
 - g) If bleeding begins again, tighten tourniquet after a few seconds
- <u>4.15.6.f.</u> h) Tell doctor when and how long tourniquet was applied Place the time the tourniquet was applied on the patient.
- <u>4.15.7.</u> 4.15.8. Given verbal descriptions or pictures of correct and incorrect causes of physical shock, you <u>the trainee</u> will select the correct causes. The correct causes include:
 - 4.15.7.a. a) Severe loss of blood;
 - 4.15.7.b. b) Intense pain;
 - 4.15.7.c. c) Severe or extensive injury;
 - 4.15.7.d. d) Burns;
 - 4.15.7.e. e) Anxiety;
 - 4.15.7.f. f) Poisonous gases;
 - 4.15.7.g. g) Sight of blood or injury to fellow worker.
- 4.15.8. 4.15.9. Given verbal descriptions of physical and emotional reactions, you the trainee will select the symptoms of physical shock. These symptoms include:
 - 4.15.8.a. a) Chalk-like appearance;
 - 4.15.8.b. b) Dull or anxious expression;
 - 4.15.8.c. e) Shallow breathing:
 - 4.15.8.d. d) Cold, moist skin.

<u>4.15.9.</u> 4.15.10. Given pictures of correct and incorrect procedures for treating physical shock, you the trainee will select the correct procedures. The correct procedures include:

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4.15.9.a. a) Lay the victim flat;
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4.15.9.b. b) Elevate feet six inches (6");

4.15.9.c. e) Clear mouth of foreign object;

4.15.9.d. d) Loosen clothing;

4.15.9.e. e) Keep the victim warm.

4.15.10. 4.15.11. Given pictures of correct and incorrect procedures for treating open wounds, you the trainee will select the correct procedures. The procedures are:

4.15.10.a. a) Stop the bleeding;

4.15.10.b. b) Cut or tear away the clothing around the wound;

4.15.10.c. c) Wipe away foreign particles from wound with a piece of sterile gauze;

4.15.10.d. d) Cover entire wound with sterile compresses or gauze;

4.15.10.e. e) Apply bandages securely.

4.15.11. 4.15.12. Given pictures of correct and incorrect methods of dressing wounds, you the trainee will select the correct methods. The wounds include:

4.15.11.a. a) Head wounds;

4.15.11.b. b) Injured eyes;

4.15.11.c. e) Arm wounds;

4.15.11.d. d) Leg wounds;

4.15.11.e. e) Foot wounds;

4.15.11.f. f) Hand wounds.

4.15.12. 4.15.13. Given pictures of correct and incorrect treatments for closed wounds, you the trainee will select the correct treatments for closed wounds.

4.15.13. 4.15.14. Given pictures of correct and incorrect procedures for treating a rupture or hernia in the abdomen, you the trainee will select the correct procedures. The procedures are:

4.15.13.a. a) Lay the victim flat on his/her back and draw his/her knees up;

4.15.13.b. b) Center one (1) narrow cravat bandage along the top of the thighs halfway

between the hips and knees;

- 4.15.13.c. e) Pass the ends around the thighs and cross them under the bend in the knees;
- 4.15.13.d. d) Carry the ends around the ankles and tie them in front and between the ankles;
- 4.15.13.e. e) Place a pillow or rolled up blanket under the knees;
- 4.15.13.f. f) Place a second cravat bandage underneath the padding and bring the ends up over the thighs near the knees and tie them securely;
 - 4.15.13.g. g) If swelling remains, place a cold appliance over the site.
- <u>14.15.14.</u> 4.15.15. Given pictures of correct and incorrect methods of treating foreign bodies in the eyes, ears, nose, and throat, you the trainee will select the correct methods.
- <u>14.15.15.</u> Given pictures of correct and incorrect procedures for general care and treatment of nonchemical burns, you the trainee will select the correct procedures. The correct procedures include:
 - 4.15.15.a. a) Remove clothing from burned area (unless clothing sticks to the skin);
 - 4.15.15.b. b) Cover burn with cool, moist dressing;
 - 4.15.15.c. c) Cover the victim with a blanket;
 - 4.15.15.d. d) Treat for shock.
- 4.15.16. 4.15.17. Given pictures of correct and incorrect treatments for fractures of the following parts of the body: head, neck, back, rib, pelvis, arm, hand, leg, and foot, you the trainee will select the correct treatments.
- 4.15.17. 4.15.18. Given pictures of correct and incorrect methods of moving an injured person from a surface mine, you the trainee will select the correct method.
- 4.15.18. 4.15.19. Given a list of places at a surface mine, you the trainee will select the places where first-aid equipment must be located. Correct place are:
 - 4.15.18.a. a) At or near each working place that coal is being mined;
 - 4.15.18.b. b) At each preparation plant and loadout;
 - 4.15.18.c. e) At shops;
 - 4.15.18.d. d) At other surface installations that regularly employ ten (10) or more people.
 - 4.16. Training course measurement criteria. Unit Objective:
- 4.16.1. The purpose of the Likert scale attitude tests is to measure attitudinal changes of the trainees as a result of this course. This will be accomplished by administration of this test before and after

the training.

- 4.16.2. Given a ten (10) item Likert scale attitude test at the beginning and end of the course, the trainee will display positive attitudes toward coal mining by scoring seventy percent (70%) or higher.
- 4.16.3. Given a ten (10) item Likert scale attitude test a the beginning and end of the course, the trainee will display a positive attitude toward safety by scoring at least seventy percent (70%) on the test.
- §48-3-5. Approval Procedures for Training Programs.
- 5.1. All training centers planning to participate in the forty (40) hour training effort must be approved by the Board of Miner Training, Education and Certification Coal Mine Health and Safety. Each prospective training center must send to the Department of Energy, 1615 Washington Street East, Charleston, West Virginia 2531160 main office of the West Virginia Office of Miners' Health, Safety and Training, Attention:

 Board of Miner Training, Education and Certification Coal Mine Health and Safety, the following information.
 - 5.1.1. a) Address and location of the training center:
 - 5.1.2. b) Description of equipment and facilities available.;
 - 5.1.3. e) List of participating instructors (see Section 6 for approval procedures for instructors).
 - 5.1.4. d) Classroom dimensions and approximate number of students per class.;
 - 5.1.5. e) Name and address of person(s) responsible for training program.
- 5.2. Any training center not using the training course available through the Department of Energy West Virginia Office of Miners' Health, Safety and Training must obtain approval of its program by submitting the following additional information.
- <u>5.2.1.</u> a) An outline of the proposed course showing how it meets the criteria established by the Board of Miner Training, Education and Certification. Coal Mine Health and Safety:
- <u>5.2.2.</u> b) A list of instructional material to be used (e.g., films, programmed material, etc.) and noting where it would be used within the instructional sequence:
- <u>5.2.3.</u> e) A description of the instructional methods to be used throughout the course (e.g., lecture demonstration, personalized instruction, team teaching, etc.)

§48-3-6. Approval Procedures For Instructors.

- 6.1. Each instructor who will be teaching the forty (40) hour course must seek approval by the Department of Energy West Virginia Office of Miners' Health Safety and Training by sending the following information to the Department of Energy, 1615 Washington Street East, Charleston, West Virginia 25311. main office of the West Virginia Office of Miners' Health, Safety and Training:
- <u>6.1.1.</u> a) A summary of the individual's teaching experience and related credentials (e.g., <u>M.E.S.A</u> <u>MSHA</u> teaching certificates).

- <u>6.1.2.</u> b) A description of the individual's work experience, surface mining or otherwise, in sufficient detail to determine the individual's exposure to the unit operations of coal mining:
 - 6.1.3. c) The content area(s) in the training program for which he/she will be responsible;
- 6.1.4. d) The name and address of the person who should be notified as to the candidate approval or disapproval.